

REMARKS

At the outset, Applicants wish to thank Examiner Soohoo for the courtesy extended to the undersigned and to Christine McCormack during a telephonic interview held on September 12, 2003. Applicants hereby amend the claims and present remarks consistent with the discussion therein.

Status of the Claims

Prior to entry of this Amendment, claims 38-40, 43, 45, 47, 51, 54, 63, 68, 77, 113-115, 118, 120, 122, 126, 129, 137, 142 and 151-153 are pending in the application. Amended claims 38 and 113, are independent claims under consideration.

The pending claims stand rejected as follows:

- Claims 47 and 122 under 35 U.S.C. §112, second paragraph, as being indefinite;
- Claims 38, 39, 40, 43, 47, 63, 68, 113, 114, 115, 118, 122, 137, and 142 under 35 U.S.C. §102(b) as being anticipated by US Patent No. 2,950,725 to Jacke *et al.* ("Jackie");
- Claims 38-40, 43, 45, 47, 51, 54, 63, 68, 77, 113-115, 118, 120, 122, 126, 129, 137, 142 and 151-153 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Number 6,413,783 to Wohlstadter *et al.* ("Wohlstadter"); and
- Claims 38-40, 43, 45, 47, 51, 54, 63, 68, 77, 113-115, 118, 120, 122, 126, 129, 137, 142 and 151-153 under 35 U.S.C. §103(a) as being obvious over Wohlstadter.

In light of the above amendments and remarks presented herein, Applicants respectfully request reconsideration and withdrawal of all grounds of rejection of pending claims.

Amendments to the Claims

Applicants have amended claims 38-40, 47, 68, 113, 115, 122, and 142 to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been introduced by these amendments; support being found in the claims as originally filed and throughout the specification; at least at page 4, lines 27-30; page 5, lines 5-24; page 8, line 14-25; page 50, line 5-9; page 52, line 9 to page 53, line 12; and page 56, lines 5-8.

Priority Under 35 U.S.C. §119(e)

Applicants thank the Examiner for pointing out the typographical error in the priority claim, and submit that the Request for Corrected Filing Receipt filed on March 19, 2002, was filed in error. Applicants wish to clarify that this application claims priority to U.S. Provisional Application Serial No. 60/246,838 filed on November 8, 2000, and respectfully request the reinstatement of the Second Preliminary Amendment originally submitted along with the Supplemental Declaration and Supplemental Patent Application Data Sheet on February 12, 2002 to correct the priority claim (attached herewith under Tab 1).

Rejection Under 35 U.S.C. §112, Second Paragraph

Claims 47 and 122 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants have amended claims 47 and 122 to exclude the term “defect,” objected to by the Examiner. Applicants submit that claims 47 and 122, as amended, properly comply with 35 U.S.C. §112, second paragraph, and respectfully request reconsideration and withdrawal of the rejection of claims 47 and 122 as indefinite.

Jackie Fails to Anticipate the Claimed Invention

Briefly, Jackie discloses an ultrasonic cleaning apparatus. The apparatus includes a hermetically sealed housing having a focused emitting plate and a plurality of transducers connected in an electrical circuit. Positioned above the level of the cleaning liquid is a conveyer from which is suspended a basket which contains a work object submerged in cleaning liquid. In operation, the transducers generate ultrasonic waves, which are emitted through the focused emitting plates in the form of beams converging in a focal zone of intense ultrasonic energy. The work object is then passed through this focal zone and cleaned. See Jackie col. 2, lines 33-43 and col. 3, lines 33-38.

Jackie fails to teach or suggest both “selectively directing an acoustic field to at least one nucleation feature located proximate to an active site to impart motion to a constituent in the fluid proximate to said active site,” as recited in Applicants’ claim 38, as amended, and an apparatus which is adapted to direct an acoustic field “selectively to at least one nucleation

feature located proximate to an active site to impart motion to a constituent in the fluid proximate to said active site,” as recited in Applicants’ amended claim 113.

As discussed during the telephonic interview on September 12, 2003, in contrast to Applicants’ amended claims 38 and 113, Jackie merely discloses passing a work object over the focal zone of the ultrasonic waves such that the work object is cleaned by an agitated cleaning solution. See Jackie, col. 3, lines 33-38. Jackie does not teach or suggest directing an acoustic beam at a nucleation site proximate to an active site such that motion is imparted to a constituent in the fluid proximate to said active site, as recited in Applicants’ claims 38 and 113, as amended. See Jackie, col. 3, lines 46-51.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the §102 rejection of the amended claims 38 and 113, based on Jackie. Because claims 39-40, 43, 45, 47, 51, 54, 63, 68, 77, 114-115, 118, 120, 122, 126, 129, 137, 142 and 151-153 depend either directly or indirectly from claims 38 or 113, and recite further limitations thereon, Applicants respectfully request that the Examiner reconsider and withdraw the Jackie-based §102 rejections of those claims, as well.

Wohlstadter Fails to Anticipate the Claimed Invention

Briefly, Wohlstadter discloses an apparatus that includes an assay cell, a base, a diaphragm, and a sonication generator. The base is shaped to define a cavity and an aperture. In operation, reagents are introduced into the cavity, and the generator sonicates the diaphragm. The diaphragm conducts the sonication energy to the cavity, and thus to the reagents contained therein. See Wohlstadter, col. 10, lines 3-14 and 31-41.

Wohlstadter fails to teach or suggest either “selectively directing an acoustic field to at least one nucleation feature located proximate to an active site to impart motion to a constituent in the fluid proximate to said active site”, as recited in Applicants’ claim 38, as amended, or an apparatus adapted to direct an acoustic field “selectively to at least one nucleation feature located proximate to an active site to impart motion to a constituent in the fluid proximate to said active site”, as recited in Applicants’ amended claim 113.

As discussed during the interview, rather than selectively directing an acoustic field to at least one nucleation feature located proximate to an active site to impart motion to a constituent in the fluid proximate to the active site, Wohlstadter discloses scattering acoustic energy into a reaction chamber, causing agitation to occur throughout the chamber, which results in the mixing of reagents therein. Thus, Wohlstadter's sonic waves emitted into the cavity are not selectively directed to at least one nucleation feature located proximate to an active site to impart motion to a constituent in the fluid proximate to said active site, as recited in Applicants' claims 38 and 113, as amended.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the §102 rejection of the amended claims 38 and 113, based on Wohlstadter. Because claims 39-40, 43, 45, 47, 51, 54, 63, 68, 77, 114-115, 118, 120, 122, 126, 129, 137, 142 and 151-153 depend either directly or indirectly from claims 38 or 113, and recite further limitations thereon, Applicants respectfully request that the Examiner reconsider and withdraw the Wohlstadter-based §102 rejections of those claims, as well.

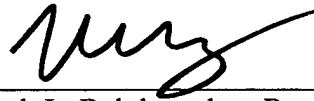
Rejection Under 35 U.S.C. §103(a)

As explained above, Wohlstadter does not teach or suggest selectively directing an acoustic field to at least one nucleation feature located proximate to an active site to impart motion to a constituent in the fluid proximate to said active site, as required by Applicants' amended claims 38 and 113. Because Wohlstadter does not teach or suggest every limitation of independent claims 38 and 113, as amended, Applicants respectfully request that the Examiner reconsider and withdraw the rejections under 35 U.S.C. § 103(a) of claims 38 and 113, and all claims that depend directly or indirectly from these independent claims.

CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and allowance of claims 38-40, 43, 45, 47, 51, 54, 63, 68, 77, 113-115, 118, 120, 122, 126, 129, 137, 142 and 151-153 in due course. The Examiner is invited to contact Applicants' undersigned representative by telephone at the number listed below to discuss any outstanding issues.

Respectfully submitted,



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